

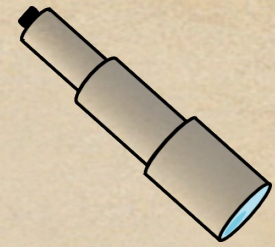
Defining Reality

Creating Executable System Descriptions

<http://schuchert.wikispaces.com/ndc>

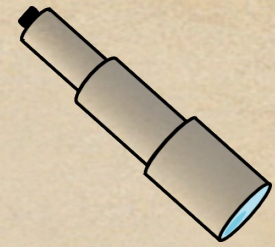
Brett L. Schuchert

Introduction



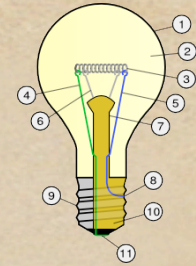
- ◆ This is a placeholder for the obligatory introductions.

Overview



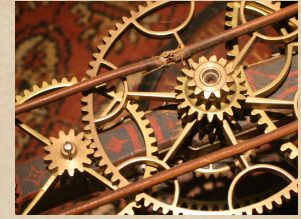
- ◆ Creating stories
- ◆ Defining acceptance criteria
- ◆ Expressing examples
- ◆ Making examples run (but fail)
- ◆ Making examples pass

Organization



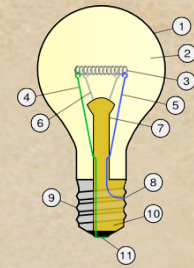
- ◆ Work in small groups (4 give or take)
- ◆ Series of timed exercises with review
- ◆ At least one computer per group

Self Organize



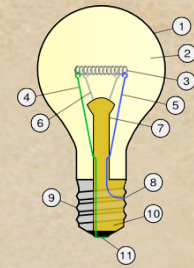
- ◆ As a team, we want to organize into small groups so that we can work on the project's exercises together
 - ◆ Team size 3 - 5
 - ◆ At least one computer per team
 - ◆ Plenty of index cards and pens

The Problem



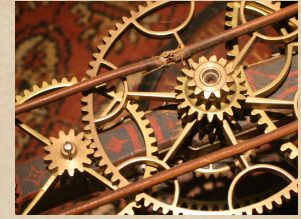
- ◆ A Digital Video Recorder (dvr) allows someone to watch television live, or recorded shows.
- ◆ For more details:
<http://schuchert.wikispaces.com/DvrDesignProblem>

Stories



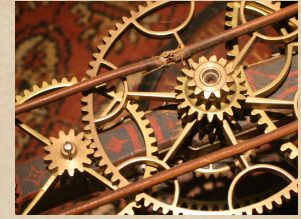
- ◆ I - Independent
- ◆ N - Negotiable
- ◆ V - Valuable
- ◆ E - Estimable
- ◆ S - Small
- ◆ T - Testable

Create stories



- ◆ Develop candidate stories from the problem description.
 - ◆ One per index card
 - ◆ 10 Minutes

Recap Stories



- ◆ Each group report on one story
- ◆ Compare/contrast
- ◆ Observations within/between groups?

A Few Examples



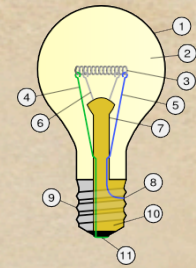
- ◆ As a viewer, I can create a season pass for a show I want to watch on a channel so that I do not miss any episodes.
- ◆ As a viewer interested in a particular season pass, I can indicate when I've watched a recorded program so that the program can be deleted when all interested viewers have watched it.

A few more...



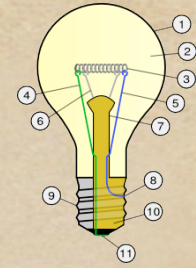
- ◆ As a TV viewer, I can create a season pass for the current program I am watching so that I can record all episodes.
- ◆ As a TV viewer, I can select a single program to record.
- ◆ As a TV viewer, I can select a program to record that conflicts with the to do list and leave the to do list as is.
- ◆ As a TV viewer, I can try to record a program that conflicts with the to do list and cancel a conflicting program.
- ◆ As a TV viewer, I can change the priorities of my season passes to make sure my favorite programs are recorded over less important programs when there are conflicts.
- ◆ As a TV viewer, I can register an interest with a program such that when deleting an episode, it won't be deleted unless all viewers with an interest have opted to delete it.

Acceptance Criteria



- ◆ What makes a story implementable?
 - ◆ Examples of success
 - ◆ Examples of failures
 - ◆ Is it in the system?

A Guideline



- ◆ S - Specific
- ◆ M - Measurable
- ◆ A - Attainable
- ◆ R - Relevant
- ◆ T - Time-bound

Acceptance Criteria



- ◆ Select at least 2 “significant” stories
 - ◆ For each, create acceptance criteria
 - ◆ We’ll review after 10 minutes
 - ◆ We’ll review again after 10 more

Some Examples



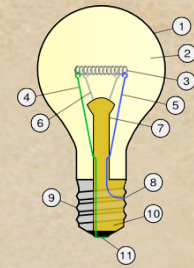
- ◆ Create season pass for something with 10 upcoming episodes, all 10 are added to the “to do” list
- ◆ Create season pass for something on channel 43 but there are also episodes on channel 13. Only the episodes on channel 43 added to “to do” list.
- ◆ Create season pass for something with duplicated episodes. Only non-duplicated episodes are added to the “to do” list.
- ◆ Create a season pass for something with duplicated episodes where the user selected a time of 9 PM. There are other episodes repeated. When possible, the episode at the time closest to 9 PM (in either direction) gets recorded.
- ◆ Create a season pass that conflicts with another season pass. Inform the user that this season pass will never record anything

BDD-Style



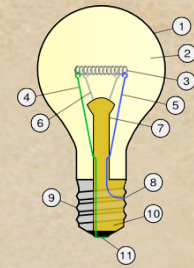
- ◆ **Scenario:** Record all episodes of single program
 Given a program named House with 10 episodes
 When I create a season pass for House
 Then I should have 10 episodes in my to do list for House
- ◆ **Scenario:** Higher priority programs recorded
 Given a program called Chuck with 1 episode on 2008/4/4, 7PM
 And a program called House with 1 episode on 2008/4/4, 7PM
 And a DVR with 1 recorder
 When I create a season pass for Chuck
 And I create a season pass for House
 Then I should have Chuck in my to do list
 And I should have House in my conflict list

Options...



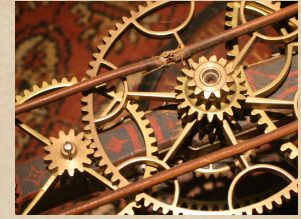
- ◆ FitNesse + Fit / FitNesse + Slim
 - ◆ Write examples using tables
 - ◆ Create “glue” to execute code
 - ◆ Does not directly handle UI
- ◆ Watir
 - ◆ “Web Application Testing in Ruby”
 - ◆ Execute IE via OLE
- ◆ Cucumber
 - ◆ Write text-based features (user stories)
 - ◆ Write Ruby code to handle
- ◆ Selenium
 - ◆ Record browser interaction as script
 - ◆ Execute as it
 - ◆ Generate test code in various Unit Testing Tools

Expressing 'em



- ◆ As a TV viewer, I can create a season pass for the current program I am watching so that I can record all episodes.
 - ◆ Create season pass for something with 4 upcoming episodes, all 4 are added to the “to do” list.
 - ◆ **Scenario:** Recording episodes with a season pass
 - Given** a Program called “Battlestar Galactica” every Friday at 9 PM
 - And** with the following episodes: [He That Believeth in Me, Six of One, The Ties That Bind, Escape Velocity]
 - When** I create a season pass for “House M.D.”
 - Then** I should have [He That Believeth in Me, Six of One, The Ties That Bind, Escape Velocity] in to do list.

Follow along...



- ◆ For a detailed set of tutorials...
[http://schuchert.wikispaces.com/
FitNesse.Tutorials](http://schuchert.wikispaces.com/FitNesse.Tutorials)